

CLAIMS

1. An apparatus for cutting a workpiece, the apparatus comprising:
a linear feed assembly capable of automatically moving a workpiece forward and backward along its longitudinal axis; and
an automated cutting assembly having at least one cutting blade, the cutting blade
5 rotatable about a pivot axis, movable along a vertical axis into and out of cutting contact with a workpiece, and rotatable along a bevel axis, the apparatus thereby able to cut the workpiece at a compound angle using a stab cut..
2. An apparatus as in Claim 1 wherein the cutting blade is further automatically movable along a transverse axis, the apparatus able to cut the workpiece at a compound cut using a stab cut in combination with cutting while moving the blade along the transverse axis.
3. An apparatus as in Claim 1 further comprising a computer assembly for operating and controlling movement of the cutting blade.
4. An apparatus as in Claim 1, the cutting blade having a maximum cut length longer than the length of the compound cut.
5. An apparatus as in Claim 1, the blade having a maximum cut length of at least six inches.
6. An apparatus as in Claim 5 further comprising upstream and downstream feed assemblies operable to clamp and move workpieces, sense the presence or absence of a workpiece, determine the length of a workpiece, and position the workpiece for cutting at a selected length.
7. An apparatus as in Claim 1, the blade having a maximum cut length of at least ten inches.
8. An apparatus as in Claim 1 wherein the apparatus is able to cut the workpiece at other than a ninety-degree bevel cut.

9. An apparatus for cutting a workpiece, the apparatus comprising:
a linear feed system for moving a workpiece along its longitudinal axis; and
a cutting assembly having a cutter blade capable of cutting the workpiece using a stab cut to create a bevel cut on the workpiece.
10. An apparatus as in 9 wherein the cutting blade is further automatically movable along a transverse axis and is capable of cutting the workpiece using a stab cut in combination with a transverse cut.
11. An apparatus as in Claim 9 further comprising a computer assembly for operating and controlling movement of the cutting blade.
12. An apparatus as in Claim 9, the cutter blade having a maximum cut length greater than the length of the bevel cut.
13. An apparatus as in Claim 9 wherein the bevel cut is a ninety-degree bevel cut.
14. An apparatus for cutting a workpiece, the apparatus comprising:
a linear feed assembly for moving a workpiece along its longitudinal axis; and
a cutting assembly having a cutting blade, the cutting blade having a maximum cut length and capable of automatically creating a bevel cut wherein the length of the bevel cut is greater than the cut length of the blade.
15. An apparatus as in 14 wherein the cutting blade is further automatically movable along a transverse axis.
16. An apparatus as in Claim 16 wherein the cutting blade is operable to automatically create at least one bevel cut on a workpiece, at least one transverse cut on the workpiece, and at least one scarf cut on the workpiece..

17. A method for automatically cutting a workpiece, the method comprising the steps of:
positioning a cutting blade by rotating the blade about a vertical axis;
positioning the cutting blade by rotating about a bevel axis; and
lowering the blade into cutting contact with the workpiece and stab cutting the
5 workpiece while simultaneously moving a workpiece along its longitudinal axis, thereby
creating a bevel cut.
18. A method as in Claim 17 further comprising the step of moving the blade along a
transverse axis.
19. A method as in Claim 17 further comprising the step of moving the cutting blade
along a transverse axis simultaneous to moving the workpiece along its longitudinal axis
20. A method as in Claim 17 further comprising making a ninety-degree bevel cut.